appended claims.

WHAT IS CLAIMED IS:

1. An optical wavelength converting apparatus comprising:

a first semiconductor laser;

a second semiconductor laser; and

a wavelength converting element for converting first laser light from said first semiconductor laser and second laser light from said second semiconductor laser to sum frequency light;

wherein there is provided an external resonator structure in which said first semiconductor laser and said wavelength converting element are arranged such that the first laser light can be put under a resonant condition, and an optical path of the second laser light is so determined that the second laser light can propagate through said wavelength converting element.

2. An optical wavelength converting apparatus according to claim 1, wherein said second semiconductor laser is arranged such that the second laser light can enter said wavelength converting element through a place between said first semiconductor laser and said wavelength converting element.

3. An optical wavelength converting apparatus according to claim 1, wherein said second semiconductor laser is arranged such that the second laser light can enter said wavelength converting element through a place on a side opposite to a side on which said first semiconductor laser is arranged.

4. An optical wavelength converting apparatus according to claim

1, wherein said second semiconductor laser is arranged such that the second laser light can enter said wavelength converting element through said first semiconductor laser.

5. A picture projection type display apparatus comprising:

a projection body; and

a light source for projecting light on said projection body, said light source including an optical wavelength converting apparatus which includes a first semiconductor laser, a second semiconductor laser, and a wavelength converting element for converting first laser light from said first semiconductor laser and second laser light from said second semiconductor laser to sum frequency light, and in which there is provided an external resonator structure in which said first semiconductor laser and said wavelength converting element are arranged such that the first laser light can be put under a resonant condition, and an optical path of the second laser light is so determined that the second laser light can propagate through said wavelength converting element.

6. An electrophotographic image forming apparatus comprising:

a projection body; and

a light source for projecting light on said projection body, said light source including an optical wavelength converting apparatus which includes a first semiconductor laser, a second semiconductor laser, and a wavelength converting element for converting first laser light from said first semiconductor laser and second laser light from said second semiconductor laser to sum frequency light, and in which there is provided an external resonator structure in which said first semiconductor laser

and said wavelength converting element are arranged such that the first laser light can be put under a resonant condition, and an optical path of the second laser light is so determined that the second laser light can propagate through said wavelength converting element.

7. An optical wavelength converting method comprising the steps of:

generating first laser light from a first semiconductor laser;

generating second laser light from a second semiconductor laser; and

guiding the first laser light and the second laser light to a wavelength converting element to convert the first laser light and the second laser light to sum frequency light;

wherein there is provided an external resonator structure in which the first semiconductor laser and the wavelength converting element are arranged such that the first laser light can be put under a resonant condition, and an optical path of the second laser light is so determined that the second laser light can propagate through the wavelength converting element.

8. An optical wavelength converting method according to claim 7, wherein the second semiconductor laser is arranged such that the second laser light can enter the wavelength converting element through a place between the first semiconductor laser and the wavelength converting element.

9. An optical wavelength converting method according to claim 7,

wherein the second semiconductor laser is arranged such that the second laser light can enter the wavelength converting element through a place on a side opposite to a side on which the first semiconductor laser is arranged.

10. An optical wavelength converting method according to claim 7, wherein the second semiconductor laser is arranged such that the second laser light can enter the wavelength converting element through the first semiconductor laser.